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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/770,617	02/02/2004	Wolfgang Eis	AMB-131-02	2301
24131	7590	10/13/2005	EXAMINER	
LERNER AND GREENBERG, PA P O BOX 2480 HOLLYWOOD, FL 33022-2480			HOFFMANN, JOHN M	
			ART UNIT	PAPER NUMBER
			1731	

DATE MAILED: 10/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/770,617

Applicant(s)

EIS ET AL.

Examiner

John Hoffmann

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 29 July 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-45 is/are pending in the application.
- 4a) Of the above claim(s) 30-45 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

Applicant's election without traverse of Group I, claims 1-29 in the reply filed on July 29, 2005 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Claims 30-45 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 29 July 2005.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-29 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is noted that the terms such as "follow-up", "making-up" and "bush" are not defined in the specification and have no art-recognized meaning. Therefore the terms make the claims indefinite as to what the claims cover.

Claim 6: there is no antecedent basis for "the preforms" – the claim makes it unclear as to whether preforms are part of the apparatus – and as to whether claim 1 also requires preforms.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 5-6, and 25 are rejected under 35 U.S.C. 102(e) as being anticipated by Lee 2003/0079501.

Figure 3 of Lee shows the claimed device. Each 310 is deemed to be a “bush” – and all of them together are deemed to be a furnace. 330 and 251, 252, 253 and 260 are deemed to comprise a drawing and sizing installation. And 270 are deemed to be the making-up device.

It is noted that the terms such as “follow-up”, “making-up” and “bush” have no art recognized meaning, thus the broadest reasonable interpretation of the claims is that they do not limit the claims.

The PTO gives a disputed claim term its broadest reasonable interpretation during patent prosecution. Hyatt, 211 F.3d at 1372. The “broadest reasonable interpretation” rule recognizes that “before a patent is granted the claims are readily amended as part of the examination process.” Burlington Indus. v. Quigg, 822 F.2d 1581, 1583 (Fed. Cir. 1987). Thus, a patent applicant has the opportunity and responsibility to remove any ambiguity in claim term meaning by amending the application. In re Prater, 415 F.2d 1393, 1404-05 (CCPA 1969). Additionally, the broadest reasonable interpretation rule “serves the public interest by reducing the possibility that

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claims, finally allowed, will be given broader scope than is justified." In re Am. Acad. of Sci. Tech. Ctr., 367 F.3d 1359, 1364 (Fed. Cir. 2004) (quoting In re Yamamoto, 740 F.2d 1569, 1571-72 (Fed. Cir. 1984)).

Examiner realizes that the above broadest reasonable interpretation may not be completely "reasonable", however there does not appear to be any interpretation which is clearly completely reasonable. If Applicant considers the broad interpretation to be unreasonable and Applicant does not wish to exercise the "*opportunity and responsibility to remove any ambiguity in claim term meaning by amending the application*" , then Applicant should point out why the Office's interpretation is not the "broadest reasonable", what the broadest reasonable interpretation is, and preferably point out why it is reasonable. Mere argument that the Office's interpretation is incorrect (and giving no guidance/suggestion as to what the correct interpretation is) will likely be deemed as non-responsive.

Claim 5 is clearly met.

Claim 6 is clearly met.

Claim 25: It is noted a zone is not structure. It is inherent that since the fiber is wound on a reel, that it is no longer molten, which means it was cooled. Therefore there must have been a location/zone in which it was cooled.

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The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-6, 18-19, 25, 28 and 29 are rejected under 35 U.S.C. 102(b) as being anticipated by Gouronnec 4373943.

See figures 3B, 2A and 2B which clearly show all the features of claim 1. It has 4 bushes- each separated by slots 62.

Claim 2: the angle is 90 degrees.

Claim 3: A square is a rhomboid.

Claim 4 is clearly met.

Claim 5: see the embodiment of fig 4.

Claim 6 is clearly met.

Claims 18-19: see feature 2.

Claim 25: It is noted a zone is not structure. It is inherent that since the fiber is wound on a reel, that it is no longer molten, which means it was cooled. Therefore there must have been a location/zone in which it was cooled.

Claim 28: one common way of looking at the matrices is that the axes are in a plane that is parallel to the rollers. However, the plane an the rollers would never meet. If two lines/planes never meet, then they do not form an angle and there cannot be an

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angle between them. Applicant's figures also suggest an arrangement where the axes and the rollers never meet and never form an angle. Furthermore, the drawing fail to show the angle required by claim 28. It is deemed that the only way applicant could possibly meet the claim language is by using a non-Euclidean angle – such as a Riemannian or Lobachevskian angle. Examiner presumes that Gouronnec structure also has an angle in the same manner that Applicant's invention has an angle since such is substantially the same as applicant's invention..

Claim 29 is an intended use, does not provide additional structure and does not define over the prior art. Gouronnec can use a preform of substantially any composition.

### ***Claim Rejections - 35 USC § 103***

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

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The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 7 –8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gouronnec 4373943 alone or in view of Watts 4204852.

Gouronnec discloses using 10 or more fibers/preforms (col. 3, lines 65-68 – but not the claimed 110 fibers. It would have been obvious to draw as many preforms/fibers as desired – and have the corresponding number of bushings – depending upon how much information-carrying capacity one wants the cable to have. Watts is cited as showing it is known to have 500 fibers (col. 2, lines 19-30).

**From MPEP 2144.04**

**B. Duplication of Parts**

In re Harza, 274 F.2d 669, 124 USPQ 378 (CCPA 1960) (Claims at issue were directed to a water-tight masonry structure wherein a water seal of flexible material fills the joints which form between adjacent pours of concrete. The claimed water seal has a "web" which lies \*\* in the joint, and a plurality of "ribs" \*\* >projecting outwardly from each side of the web into one of the adjacent concrete slabs. <The prior art disclosed a flexible water stop for preventing passage of water between masses of concrete in the



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shape of a plus sign (+). Although the reference did not disclose a plurality of ribs, the court held that mere duplication of parts has no patentable significance unless a new and unexpected result is produced.).

Claim 8: it would have been obvious to place the 500-1000 bushes in rows, so as to more easily monitor the entire apparatus.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gouronnec 4373943 alone or in view of Watts 4204852 as applied to claim 7 above, and further in view of Jensen 5062876.

Jensen teaches that putting fiber drawing arrangements in rows so as to maximize the packing density (col. 3, lines 30-33). It would have been obvious to place the bushes into rows as claimed, so as to minimize the amount of factory floor area taken up by the apparatus.

Claims 9-11, 21-23 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gouronnec 4373943

Col. 2, lines 57-60 teaches the use of independent furnaces. Examiner takes Official notice that it is well known to use temperature controllers to control furnaces so as to provide the desired temperature/heating of the furnace. It is nearly impossible to get a desired temperature without a controller. It would have been obvious to provide

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controllers to the independent furnaces so as to accurately provided the optimal temperature for the process.

As to claim 10: Examiner also takes Official Notice that temperature controllers inherently have devices which measure temperature, and then means to adjust the temperature. One cannot control temperature without first knowing what the temperature is, and then changing it.

Claim 11: Examiner takes further Official Notice that diffusers are well known in the art – and are used for the same reason that Applicant discloses: to diffuse the heat to more evenly apply the heat to the end of preform. It would have been obvious to use one in the each of the independent furnaces, so as to diffuse the heat as is typical. Alternatively, it is deemed that the receptor of the induction furnaces (col. 2, line 59) reads on the claimed diffuser, because it diffuse heat.

Claim 21, Figure 2a clearly shows a threaded spindle, a motor and a guide. Alternatively, it would have been obvious to one of ordinary skill that that figure 2a reasonable shows a threaded spindle, a motor and a guide. Examiner also takes Official Notice that such are conventional preform feeding structures. However there is no indication that the motor is geared. However a geared motor is disclosed at col. 6, lines 19-20 – it would have been obvious to use a geared motor, based on what sort of motors one have available, for the desired feed rate.

Claims 22-23 – it is deemed that anything can be moved manually by using a large enough force. Furthermore manual means is generally not a patentable invention.

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Claim 27: Figure 2A reasonably suggests that 2 fibers pass over one roller and the other 2 pass over the others. Nevertheless it is clear that if feature 4 were to have 10 fibers/bushes as disclosed in Gouronnec, that there would be fibers (i.e. at least 2 from one half) that would pass over one roller, and fibers from the other half would pass over the second. Furthermore, the passage of fibers is method, not structure: the 10 fiber invention would clearly be capable of meeting the passing requirement.

**From MPEP 2144.04**

**D. Making Adjustable**

In re Stevens , 212 F.2d 197, 101 USPQ 284 (CCPA 1954) (Claims were directed to a handle for a fishing rod wherein the handle has a longitudinally adjustable finger hook, and the hand grip of the handle connects with the body portion by means of a universal joint. The court held that adjustability, where needed, is not a patentable advance, and because there was an art-recognized need for adjustment in a fishing rod, the substitution of a universal joint for the single pivot of the prior art would have been obvious.).

**III. AUTOMATING A MANUAL ACTIVITY**

In re Venner, 262 F.2d 91, 95, 120 USPQ 193, 194 (CCPA 1958) (Appellant argued that claims to a permanent mold casting apparatus for molding trunk pistons were allowable over the prior art because the claimed invention combined "old permanent-mold structures together with a timer and solenoid which automatically actuates the known pressure valve system to release the inner core after a predetermined time has elapsed." The court held that broadly providing an automatic or mechanical means to replace a manual activity which accomplished the same result is not sufficient to distinguish over the prior art.).

Still further for claim 23: any position could be a service position. It simply depends upon what sort of servicing one wishes to perform.

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Claims 1 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sanghera in view of Gouronnec and Ishihara 2002/0078715.

Sanghera does not teach the multiple bush/preform/draw structure required by the claims. Sanghera just teaches the single fiber approach. It would have been obvious to apply the Gouronnec teachings to the Sanghera method for the advantages that Gouronnec teaches.

As to claim 12, Sanghera only teaches one coil. But Ishihara teaches to divide the heating device into portions and to individually control their heating so as to reduce Rayleigh scattering: Ishihara [0058], Abstract and [0059]. It would have been obvious to divide the Sanghera coil into sub-units so as to better control the heating as taught by Ishihara. 106 is the diffuser.

Claims 1 and 11 and 13-17 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sanghera in view of Gouronnec.

See how Sanghera and Gouronnec are applied above.

Claim 13: see Col. 4, lines 53-54 of Sanghera.

Claims 14-15: see features 116 and/or 14 of Sanghera. It is noted that providing laminar flow is a method of use step and not structure. In as much as applicant merely provides an opening, Sanghera reads on the invention because it provides an opening. Whether any flow results in applicant's device depends entirely upon the size of the fiber/preform and other parameters.

Claims 11 and 16 are clearly met.

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Claim 17: see feature 116 of Sanghera.

Claim 24, Sanghera's lower portion of tube 106 is deemed to be a flow collar as claimed. As for the functional step – such is an intended use, not structure. Each flow collar would serve to delay the cooling of others – depending upon any heat source applied.

Claims 1, 18 and 20 rejected under 35 U.S.C. 103(a) as being unpatentable over Oh 6053013 in view of Gouronnec 4373943.

Oh teaches the basic invention, but not the multiple bushes, the follow device, and the other features of claim 1. It would have been obvious to improve the Oh invention, by multiplying all the parts in the manner that Gouronnec teaches, so as to be able to make a single multiple-fiber cable in a single process. All of the features of claim 18 are taught by Gouronnec as discussed above.

Claim 20: Oh teaches the use of a vacuum device as claimed.

Claims 25-26 rejected under 35 U.S.C. 103(a) as being unpatentable over Lee or Gouronnec as applied to claim 1 above, and further in view of Holschlag 3304163 (and optionally Watts 4204852).

The primary references do not teach the cooling zone – but such is not structure and it is inherent that the fibers are cooled as discussed above. The primary references do not teach a funnel. However it is known that when drawing large number of fibers,

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that such drags along a large amount of air which causes problems as disclosed in Holschlag (col. 1, line 26 to col. 2, line 7). The solution to this problem is to utilize funnel-type guides (see Holschlag drawings and col. 4, lines 43-71). It would have been obvious to utilize Holschlag's teachings (i.e. the use of funnels) to improve the drawing process so as to prevent the problems that Holschlag teaches.

Watts is optionally cited to show it would have been obvious to draw a large number of fibers (more than 1000 fibers) (see above).

### ***Drawings***

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the angle of claim 28 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered. It is necessary to understand the claims. Examiner is gifted with geometry and cannot fathom what the claim requires.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate

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changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Conclusion***

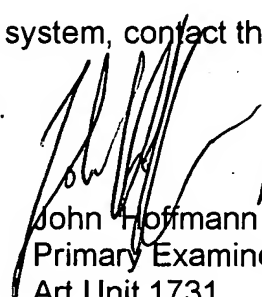
The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Varrasso, Roba, Bell&Schweppe, Kuk, Riedel, Curtiss, Stark, Elliott, Ishihara and Salavador are cited as teaching features disclosed but not claimed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Hoffmann whose telephone number is (571) 272 1191. The examiner can normally be reached on Monday through Friday, 7:00- 3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steve Griffin can be reached on 571-272-1189. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
John Hoffmann  
Primary Examiner  
Art Unit 1731

10-7-2005

jmh